A Study to Assess the Effectiveness of Selected Teaching Strategies Knowledge Regarding Drug Calculation among B.Sc.(N) Students in Selected College at Chennai

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ABSTRACT

Nurses are people who need self-assessment to maintain and improve their practice by identifying their strengths and weakness in the areas that may need to be further develop ed.

Medication errors are the most prevalent medical errors that threaten the patient's safety. It is essential to implement the selected teaching strategies to the B.Sc.(N) IV year students to reduce the complication. A study was conducted to assess the effectiveness of selected teaching strategies on knowledge regarding drug calculation among the B.Sc.(N) students in selected nursing college at Chennai. A one group pre-test and post-test pre-experimental research design was adopted for the study and 30 B.Sc. Nursing IV year students were selected using simple random sampling technique.

Semi-structured questionnaires is a standardized tool, was used to assess the effectiveness of knowledge regarding drug calculation among the B.Sc.(N) students for the duration of 30 minutes with the video clip and black board demonstration. The 'p' value was 13.33 which showed the study improves the level of knowledge regarding drug calculation after the selected teaching strategies in B.Sc. Nursing IV year.

KEYWORDS: Selected teaching strategies on knowledge regarding drug calculations, B.Sc. Nursing IV students Year students

INTRODUCTION

The nurse is the coordinator for all services and person concerned with the patient care. Nursing profession requires lots of knowledge regarding drug calculation. Drug administration is one of the most basic common function and it is a legal responsibilities of nurses ensuring patient safety during drug prescription and drug administration is essential and emphasized by legal regulation error is drug dose calculation can be detrimental to patients. Drug dose calculation and basic mathematical knowledge play a vital role in the safe drug administration to the patient. Safety in drug calculation by nursing students is an area that has been explored and necessary care competency in nursing care. Safety is one of the main objectives for all health care system, and it is a key step in ensuring a good quality of life. Safety is one of the main objectives for all health care system, and it is a key step in ensuring a good quality of life. Right dosage calculation and safe drug administration are the two main components for effective treatment of patient.

Medical calculation errors are common administration mistakes made in nursing students as the ability to competency and accurately complete drug dosage is often lactating medication administration is a large part of providing care for nursing students. Selected teaching strategies on knowledge regarding drug calculation provide a framework for nursing care. The basic assumption of selected teaching strategies is to improve the knowledge regarding drug calculation among the B.Sc.(N) students.

Statement of Problem

A study to assess the effectiveness of selected teaching strategies on knowledge regarding drug

calculation among the B.Sc.(N) students in selected college at Chennai.

Objectives
1. To assess the level of knowledge regarding drug calculation among B.Sc.(N) students.
2. To evaluate the effectiveness of selected teaching strategies on level of knowledge regarding drug calculation among the B.Sc.(N) students.
3. To associate the post-test level of knowledge regarding drug calculation among B.Sc.(N) students with their selected demographic variables.

Hypothesis
H1: There will be a significant difference between the pre-test and post-test level of knowledge scores among B.Sc.(N) students regarding drug calculation after selected teaching strategies.

H2: There will be a significant association between the level of knowledge of B.Sc.(N) students and selected demographic variables.

Research Methodology
Quantitative research approach was adopted for the study. One group pre-test post-test experimental research study design was selected. The study was conducted in Madha College of Nursing, Kundrathur in Chennai. Population consisted of B.Sc. Nursing IV year students who were studying in the Madha College of Nursing. The sample of 30 B.Sc. Nursing IV year students who fulfilled the inclusion criteria were chosen using simple random sampling technique sampling method. The tool used for the study was semi-structured questionnaires which that consists of 20 questions regarding the drug calculation. The selected teaching strategies were includes videos and demonstrations method. It was scored on a 1- point for correct and 0- point for wrong answer. After obtaining consent from the students, the data collection procedure was started by providing the questionnaire. They were given 10 – 20 minutes to complete the questionnaire.

Results and Discussion
The data collected was analyzed using both descriptive and inferential statistics on the basis of objectives and hypothesis. The demographic variables of Nursing students revealed that the majority of 18 (60%) were in the age group of 20 -21 years, with regard to gender majority of 30 (100%) were females, In accordance with higher secondary group in school with majority of 24 (80%) were bio-maths, related to academic attendance percentage with majority of 12 (40%) were 86% - 95%. Regarding previous source of information about drug calculation with majority of 26 (87%) were academic.

The first objective was to assess the level of knowledge regarding drug calculation among B.Sc.(N) students.

In pre-test the pre experimental group 9 (30%) of them are below average level of score, 19 (63%) of them were average level of score and 02 (07%) are above average level of score.
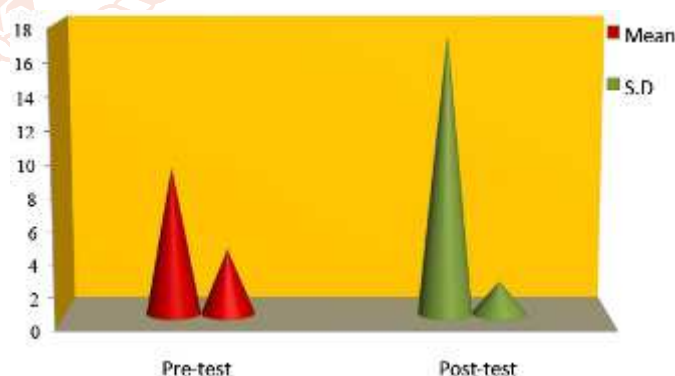
In post-test the pre-experimental group, none of them are in below average level of score, 07 (23%) of them were in average level of score and 23 (77%) were in above average level of score.
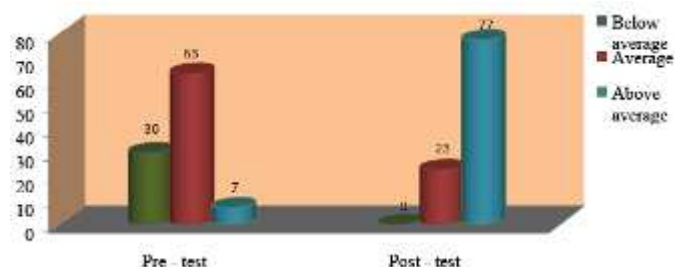
Fig.1: Frequency and percentage distribution for level of knowledge regarding drug calculation and selected teaching strategies

The second objective was to evaluate the effectiveness of selected teaching strategies on level of knowledge regarding drug calculation among the B.Sc.(N)students

In pre-experimental group, knowledge regarding drug calculation, the mean was increased from 9 to 17 which showed a marked difference of 8 and the standard deviation was decreased from 4 to 2 which showed a marked difference of 2 followed by structure teaching strategies. The paired „t" test value of 13.33 was significant at p<0.001 level.

Fig.2: comparison of mean and standard deviation of the pre-test and post-test level of knowledge regarding drug calculation among B.Sc.(N) students in pre-experimental group.

The third objective was to associate the post-test level of knowledge regarding drug calculation among B.Sc.(N)students with their selected demographic variables.

The association of post-test level of knowledge regarding calculation among B.Sc.(N) students with

selected demographic variable in pre-experimental group, with regard to age chi square value of 3.06 was non-significantly associated with post-test level of knowledge regarding drug calculation at the interval of $p < 0.05$. With regard to the gender chi square value of 0 was nil significantly associated with post-test level of knowledge regarding drug calculation at the interval of $p < 0.05$. with regard to the higher secondary group in school chi square value of 0.187 was non significantly associated with post-test level of knowledge regarding drug calculation at the interval of $p < 0.05$. with regard to the academic attendance percentage chi square value of 9.47 was significantly associated with post-test level of knowledge regarding drug calculation at the interval of $p < 0.05$. with regard to the previous source of information about drug calculation chi square value of 1.84 was nil significantly associated with post-test level of knowledge regarding drug calculation at the interval of $< p\ 0.05$.

Conclusion

This study was done to assess the effectiveness of selected teaching strategies on knowledge regarding drug calculation among B.Sc. Nursing students. From this study the researcher found that B.Sc. Nursing IV year students have improved their level of knowledge regarding drug calculation after selected teaching strategies.

Based on the findings that provision of selected teaching strategies will give adequate knowledge regarding drug calculation to the B.Sc. Nursing IV year students and help them to improve the level of knowledge regarding drug calculation. Therefore selected teaching strategies was very important to

provide quality nursing care which helps to meet the needs of the B.Sc.(N) students. The result of this study show, there is an improvement in knowledge regarding drug calculation after the selected teaching strategies.

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